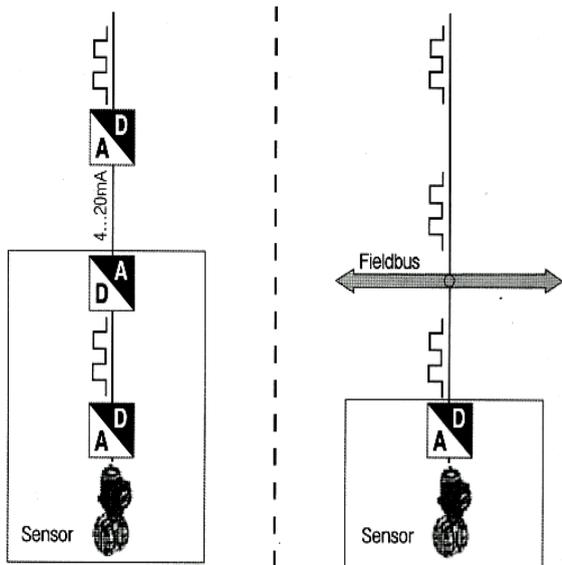


# PROFIBUS - DP/PA

/ , Cable  
 PROFIBUS 가 PLC & DCS  
 1989 (DIN19245)  
 1996 (EN50170) 20m  
 , 2000 IEC (IEC61158) 5~10mm 가 가  
 PROFIBUS - DP PROFIBUS - 가  
 PA 가  
 PLC & DCS가  
 PLC & DCS

## PROFIBUS - PA

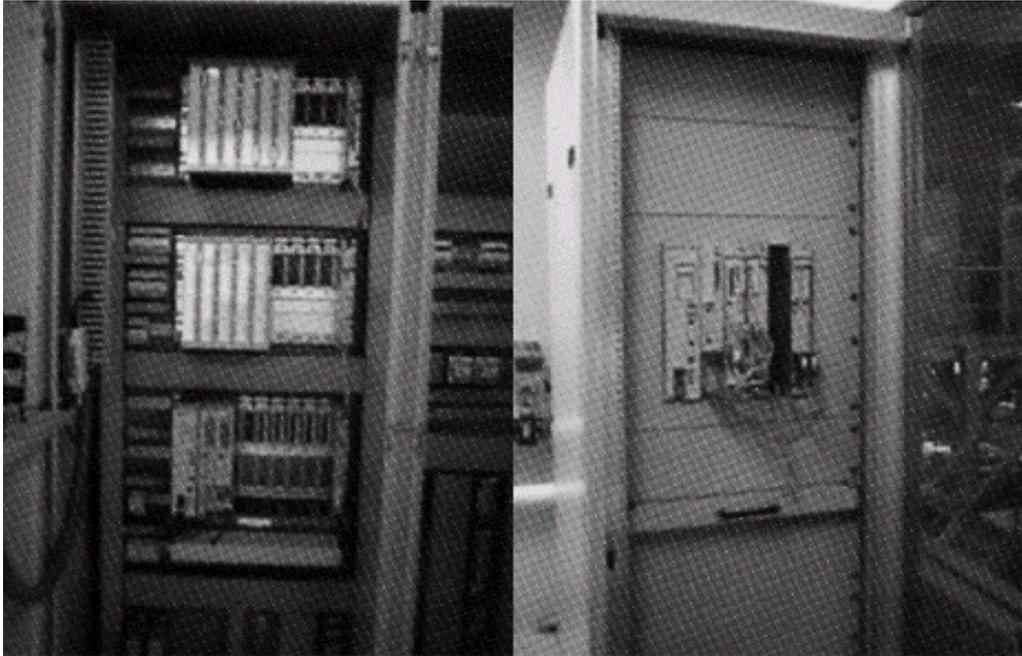
4-20mA  
 가  
 PLC & DCS 1:1



1. (PA)

(PROFIBUS -

4~20mA 가  
 4~20mA 가  
 25  
 Fieldbus



2. ( ) (PROFIBUS -PA)

가

가

PROFIBUS - DP / PA

1

(4~20mA)

A/D → D/A → A/D  
PLC(DCS)

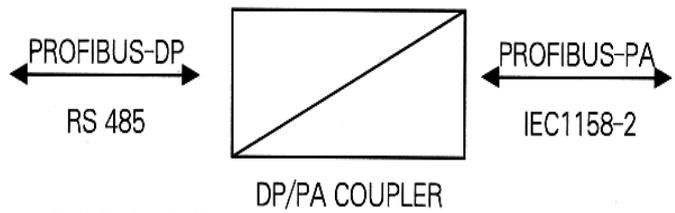
PROFIBUS - DP / PA 가

PLC & DCS

가

PROFIBUS - PA

ID,



● ASYNCHRONOUS NRZ CODING

● 1BYTE=11BIT (8UserBit+1Start+1Stop+1Parity)

● 다양한 BAUD RATE

● SYNCHRONOUS MANCHESTER CODING

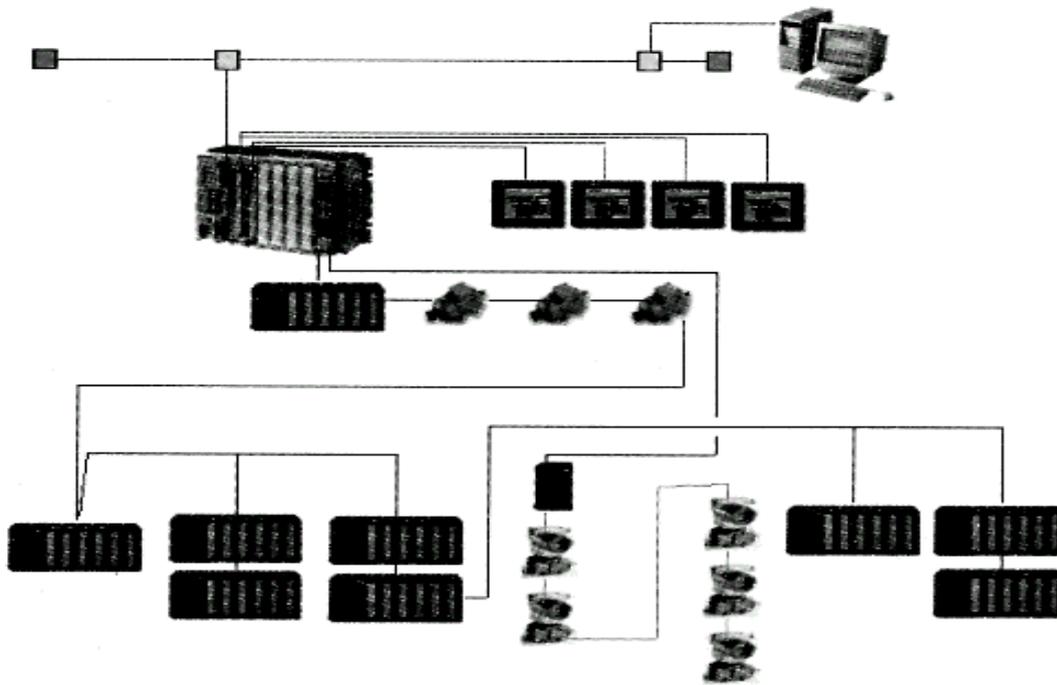
● 1BYTE=8BIT

● 고정 BAUD RATE =31.25Kbp

3. PROFIBUS DP-PA Coupler

구분	DP/PA Coupler	DP/PA Link
특징	1. 자체 Address 없음	1. 자체 Address 존재
	2. Sub-Address 존재	2. Sub-Address 없음
	3. 속도 31.25Kbps	3. PROFIBUS-DP 속도 준수
		4. 노드수가 적게 잡힘. DP/PA Link만 노드로 잡힘.
적용 PLC	S5, S7에 적용	S7에 적용

1. DP-PA Coupler DP-PA Link



4.

2  
System

CIM

2  
PROFIBUS DP/PA

가

가

Isolator

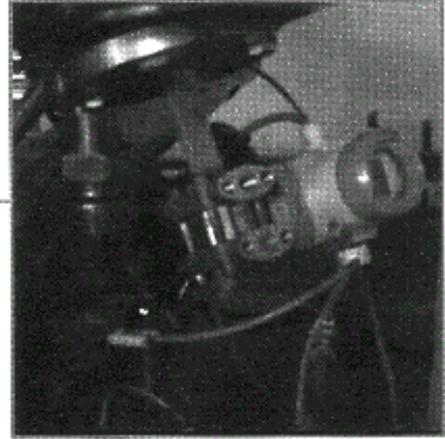
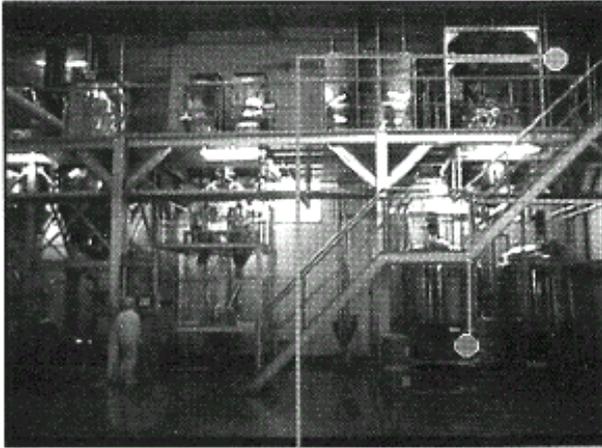
CIM

가

93

Monitoring System

4~20mA



5. ( ) Transmitter for Level( ), Local ET200M( )

2

				Screw
		Motor		SIEMENS
		PROFIBUS		CB15
PROFIBUS - DP/PA		PROFIBUS - DP		
			CR(Central Rack)	
HACCP	GIP(Dlean In	Touch Panel	RS422 (	
Place) 가		19200bps) CP544	H1	
		(10Mbps)	CP1430	HMI
	MAIN PLC		PROFIBUS - DP/PA	
SIEMENS	S5-115U(CPU945)	IM308C		4
	LOCAL			
PROFIBUS - DP	ET200M			

PROFIBUS - PA Coupler Link  
 (10mA ) Transmitter For S5 1  
 Level(SIEMENS) , Coupler  
 PROFIBUS - PA DP/PA .( Coupler  
 Coupler 5 )  
 PROFIBUS - DP ET200M  
 1.5Mbps  
 PROFIBUS - PA DP/PA Coupler  
 IEC 1158 -2  
 DP 45.45Kbps DP/PA PLC & DCS  
 Coupler PROFIBUS - PA LAN  
 31.25Kbps가 ( 3 ) .  
 PROFIBUS - DP PROFIBUS - PA , PLC & DCS  
 5 PLC & DCS  
 10ms 가 가가  
 $10 \times 5 + 10ms = 0.6sec$  가  
 PROFIBUS - PA Micro Processor  
 SIEMENS IEC 가  
 1158 -2 가 Cable PLC & DCS  
 Controller Data 가 1:1  
 가  
 Fieldbus 가  
 PROFIBUS  
 Fieldbus가 Reference가  
 가 가?  
 PROFIBUS Fieldbus

3

PROFIBUS - DP

4

Process

Process

PROFIBUS - DP/PA

/

: Control – 2000 12